

WHAT IS CLAIMED IS:

1        1. A bright surface structure formed on a member made from a metal or a  
2        resin, said structure comprising:  
3                (a) a resin film coated on said member; and  
4                (b) a thin metal film formed on said resin film, said thin metal film being  
5        made from a material selected from the group consisting of stainless steel, a  
6        titanium alloy and a nickel alloy, wherein said metal film has a smooth surface.

*Sub B1*  
2        2. A structure according to claim 1, further comprising:  
              (c) a clear protective film coated on said thin metal film.

1        3. A bright surface structure formed on a member made from a metal or a  
2        resin, said structure comprising:  
3                (a) a resin film coated on said member;  
4                (b') a thin metal film formed on said resin film, said thin metal film being  
5        made from a material selected from the group consisting of stainless steel, a  
6        titanium alloy, a nickel alloy, aluminum, titanium and chromium, wherein said  
7        metal film has a smooth surface, and  
8                (c') a clear colored protective film coated on said thin metal film.

1        4. A structure according to any one of claims 1, 2 and 3, wherein said  
2        material is austenitic stainless steel.

1        5. A structure according to any one of claims 1, 2 and 3, wherein said

2 material is a titanium alloy containing 20-80% by weight of titanium.

1 6. A structure according to any one of claims 1, 2 and 3, wherein said  
2 material is a titanium alloy containing 20-80% by weight of aluminum.

1 7. A structure according to any one of claims 1, 2 and 3, wherein said  
2 material is a nickel alloy containing 30-80% by weight of nickel.

1 8. A structure according to any one of claims 1, 2 and 3, wherein said  
2 material is a nickel alloy containing 15-25% by weight of chromium.

*Sub 1*  
*Sub 2*  
*Sub 3*

9. A structure according to any one of claims 1, 2 and 3, wherein said thin metal film is made from stainless steel or a titanium alloy and has a thickness of 0.03-1.0  $\mu$ m.

1 10. A structure according to any one of claims 1, 2 and 3, wherein said  
2 thin metal film is made from nickel alloy and has a thickness of 0.03-0.5  $\mu$ m.

*Sub 1*  
*Sub 2*

11. A structure according to claim 2, wherein said clear protective film has a thickness of 5-20  $\mu$ m.

1 12. A structure according to claim 3, wherein said clear colored protective  
2 film has a thickness of 20-40  $\mu$ m.

1 13. A structure according to claim 3, wherein said clear colored protective

2 film is made from clear resin comprising a pigment or a dye.

1 14. A structure according to claim 13, wherein said clear resin is selected  
2 from acryl-based, urethan-based or epoxy-based resins.

1 15. A structure according to claim 13, wherein said pigment is selected  
2 from carbon-based, lead chromate-based, iron(II) ferrocyanide-based,  
3 cobalt-based, or chromium oxide-based pigments.

1 16. A structure according to claim 13, wherein said pigment is selected  
2 from thren-based, quinacrine staining-based, isoindolinone-based, or metal  
3 complex pigments.

1 17. A structure according to claim 13, wherein said dye is selected from  
2 an acid dye, a mordant dye, a basic dye, a disperse dye, an edible dye, a direct  
3 dye or a sulphur dye.

1 18. A structure according to claim 1, wherein said member made from a  
2 metal is an aluminum wheel for an automobile.

1 19. A structure according to claim 1, wherein said member made from a  
2 resin is a front grille, a garnish, or an emblem of an automobile.

1 20. A method for manufacturing a bright surface structure formed on a  
2 member made from a metal or a resin, said method comprising:

3 (a) coating a resin film on said member such that said resin film has a  
4 smooth surface;

5 (b) forming a thin metal film on said resin film, said thin metal film being  
6 made from a material selected from the group consisting of stainless steel, a  
7 titanium alloy and a nickel alloy, wherein said metal film has a smooth surface.

1 21. A method according to claim 20, further comprising:

2 (c) ~~coating a clear protective film on said metal film.~~

1                   22. A method for manufacturing a bright surface structure formed on a  
2 member made from a metal or a resin, said method comprising:

3 (a) coating a resin film on said member such that said resin film has a  
4 smooth surface;

5 (b') forming a thin metal film on said resin film, said thin metal film being  
6 made from material selected from the group consisting of stainless steel, a  
7 titanium alloy and a nickel alloy, aluminum, titanium and chromium, wherein said  
8 metal film has a smooth surface; and

9 (c') coating a clear colored protective film on said thin metal film.

23. A method according to any one of claims 20, 21 and 22, wherein said resin film is coated by powder coating.

1 24. A method according to any one of claims 20, 21 and 22, wherein said  
2 material is austenitic stainless steel.

1        25. A method according to any one of claims 20, 21 and 22, wherein said  
2        material is a titanium alloy containing 20-80% by weight of titanium.

1        26. A method according to any one of claims 20, 21 and 22, wherein said  
2        material is a titanium alloy containing 20-80% by weight of aluminum.

1        27. A method according to any one of claims 20, 21 and 22, wherein said  
2        material is a nickel alloy containing 30-80% by weight of nickel.

1        28. A method according to any one of claims 20, 21 and 22, wherein said  
2        material is a nickel alloy containing 15-25% by weight of chromium.

1        29. A method according to any one of claims 20, 21 and 22, wherein said  
2        thin metal film is formed by any one of cathode arc-type ion plating and  
3        sputtering.

1        30. A method according to any one of claims 20, 21 and 22, wherein said  
2        thin metal film is made from stainless steel or a titanium alloy and has a thickness  
3        of 0.03-1.0  $\mu$ m.

1        31. A method according to any one of claims 20, 21 and 22, wherein said  
2        thin metal film is made from a nickel alloy and has a thickness of 0.03-0.5  $\mu$ m.

1        32. A method according to claim 21, wherein said clear protective film  
2        has a thickness of 5-20  $\mu$ m.

1           33. A method according to claim 22, wherein said clear colored protective  
2        film has a thickness of 20-40  $\mu$  m.

1           34. A method according to claim 22, wherein said clear colored protective  
2        film is made from a clear resin comprising a pigment or a dye.

1           35. A method according to claim 34, wherein said clear resin is selected  
2        from acryl-based, urethan-based or epoxy-based resins.

1           36. A method according to claim 34, wherein said pigment is selected  
2        from carbon-based, lead chromate-based, iron(II) ferrocyanide-based,  
3        cobalt-based, or chromium oxide-based pigments.

1           37. A method according to claim 34, wherein said pigment is selected  
2        from thren-based, quinacrine staining-based, isoindolinone-based, or metal  
3        complex pigments.

1           38. A method according to claim 34, wherein said dye is selected from  
2        an acid dye, a mordant dye, a basic dye, a disperse dye, an edible dye, a direct  
3        dye or a sulphur dye.